

June 5, 2002

Vincent J. Thinath
HT Aluminum Specialties, Inc.
6340 Indianapolis Boulevard
Hammond, IN 46320-2231

Re: Registered Construction and Operation Status
091-15654-00126

Dear Mr. Thinath:

The application from HT Aluminum Specialties, Inc., received on May 22, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that your emission source, an aluminum shredding operation located at 2043 East State Route 4, LaPorte IN, 46350, is classified as registered. This emission source consists of the following facilities:

- (a) One (1) shredding mill, with emissions controlled by a cyclone followed in series by a baghouse dust collector.
- (b) One (1) feed hopper.
- (c) One (1) vibratory feeder.
- (d) One (1) blower unit.
- (e) Conveying, screening, and outdoor storage operations.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 0.75 tons per hour, this equation provides an emission limit of 3.38 pounds per hour. The control equipment shall be in operation at all times when the shredding mill is in operation, in order to comply with this limit.

2. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

3. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust may not be visibly crossing the property lines of the source, except as provided in 326 IAC 6-4-6.

This registration is the second air approval issued to this emission source. LaPorte Metal Processing Venture was issued a registration for this emission source on August 21, 1990. All prior approvals are now considered obsolete as they have been included in this registration.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3) or 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Any change or modification which may increase the potential pollutant emissions to 25 tons per year or more of particulate matter from the equipment covered in this registration must be approved by the Office of Air Quality (OAQ) before such change may occur.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ARD

cc: File - LaPorte County
LaPorte County Health Department
IDEM - Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

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| Registration Annual Notification |
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This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) or 326 IAC 2-5.5-4(a)(3).

| | |
|-------------------------------|-------------------------------|
| Company Name: | HT Aluminum Specialties, Inc. |
| Address: | 2043 East State Route 4 |
| City: | LaPorte, IN 46350 |
| Authorized individual: | |
| Phone #: | |
| Registration #: | 091-15654-00126 |

I hereby certify that HT Aluminum Specialties, Inc. is still in operation and is in compliance with the requirements of Registration 091-15654-00126.

| |
|----------------------|
| Name (typed): |
| Title: |
| Signature: |
| Date: |

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

| | |
|-------------------------|---|
| Source Name: | HT Aluminum Specialties, Inc. |
| Source Location: | 2043 East State Route 4, LaPorte, IN 46350 |
| County: | LaPorte |
| SIC Code: | 5093 |
| Revision No.: | 091-15654-00126 |
| Permit Reviewer: | Allen R. Davidson |

On May 22, 2002, the Office of Air Quality (OAQ) received an application from HT Aluminum Specialties, Inc. relating to the operation of an aluminum shredding operation located at 2043 East State Route 4, LaPorte IN, 46350. This emission source consists of the following facilities:

- (a) One (1) shredding mill, with emissions controlled by a cyclone followed in series by a baghouse dust collector.
- (b) One (1) feed hopper.
- (c) One (1) vibratory feeder.
- (d) One (1) blower unit.
- (e) Conveying, screening, and outdoor storage operations.

History

A former emission source, LaPorte Metal Processing Venture, was issued a registration for a magnesium shredding operation at this location on August 21, 1990. This application is the first since that date. The emission source is now owned by HT Aluminum Specialties, Inc. The only operational change is that aluminum is being shredded instead of magnesium.

Enforcement Issues

There are no enforcement actions pending against this emission source.

Recommendation

The staff recommends to the Commissioner that the emission source be issued a registration. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 22, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations. (1 page)

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

The following table reflects the existing source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 14.8 |
| PM-10 | 14.8 |
| SO ₂ | 0 |
| VOC | 0 |
| CO | 0 |
| NO _x | 0 |

| HAP's | Potential To Emit (tons/year) |
|-------|-------------------------------|
| TOTAL | 0 |

The potential to emit particulate matter (PM) is less than 25 tons per year, but greater than five tons per year. Therefore, the existing source is classifiable as a registration under 326 IAC 2-5.5.

County Attainment Status

The source is located in LaPorte County.

| Pollutant | Status |
|-----------------|------------|
| PM-10 | attainment |
| SO ₂ | attainment |
| NO ₂ | attainment |
| Ozone | attainment |
| CO | attainment |
| Lead | attainment |

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone and for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

This is not a major emission source for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 because potential to emit every attainment pollutant is less than the PSD significant levels. It is not one of the 28 listed emission source categories, and no criteria pollutant is emitted at a rate of 250 tons or more. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Shredding and Material Handling

326 IAC 6-3-2 (Particulate Emissions Limitations)

The aluminum shredding mill is subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 0.75 tons per hour, this equation provides an emission limit of 3.38 pounds per hour. The control equipment shall be in operation at all times when the shredding mill is in operation, in order to comply with this limit.

State Rule Applicability - Storage

Emissions from storage of aluminum cans and aluminum turnings are assumed to be negligible.

Conclusion

The operation of these facilities shall be subject to the conditions of the attached registration, No 091-15654-00126.

Appendix A: Emissions Calculations

Company Name: HT Aluminum Specialties, Inc.
Address City IN Zip: 2043 East S.R. 4, LaPorte, IN 46350
ID: 091-15654-00126
Reviewer: Allen R. Davidson
Date: 06/07/02

The following calculations determine the emission limit under 326 IAC 6-3-2:

$$E = 4.1 * (0.750 ^{0.67}) = 3.38 \text{ lb/hr}$$

$$3.38 \text{ lb/hr} * 8760 \text{ hr/yr} / 2000 \text{ lb/ton} = 14.81 \text{ ton/yr}$$

The following calculations determine the emissions after controls:

Grain loading: 0.0078 gr/dscf
Air flow rate: 12840 acf/min

$$\frac{0.0078 \text{ grain} * 12840 \text{ acf} * 528 \text{ deg. R} * (100\% - 0\% \text{ moisture}) * 525600 \text{ min} * 1 \text{ lb} * 1 \text{ ton}}{\text{dscf} \text{ min} * (460 + 70) \text{ deg. R} * 100\% * \text{year} \text{ 7000 grain} \text{ 2000 lb}} = 3.75 \text{ ton/yr}$$

The control device is required to comply with 326 IAC 6-3-2.